

II. REMARKS/ARGUMENTS

A. General

On page 3 of the Office Action, the Examiner indicates that "regarding claims 3, 4, 11 and 12, Barnard further discloses ..." [emphasis added]. Given that in the Office Action the Examiner has not rejected any of the claims on the basis of a Barnard reference, the Applicant assumes that the inclusion of Barnard on page 3 of the Office Action is a typographical error, and that the Examiner intended to indicate Li et al.

On the basis of this assumption, the Applicant's response to the rejection of claims 3, 4, 11 and 12 is directed towards the Li et al. reference. If the Applicant's assumption is wrong in any way, the Examiner is respectfully requested to advise the Applicant, and the Applicant will file a supplemental response.

B. Summary of the Amendments

The present application still contains 40 claims.

Claims 1, 6, 8, 9, 14, 17, 20, 24, 26, 36, 37, 38, 39 and 40 have been amended in order to better define the subject matter being claimed. No new matter has been added under the current amendment.

Claims 2-5, 7, 10-13, 15-16, 18-19, 21-23, 25 and 27-35 remain the same.

C. Statements of Rejection and Reply

i) REJECTIONS UNDER 35 USC §102

In the Office Action, the Examiner has rejected claims 1-7 and 9-40 under 35 USC §102(e) as being anticipated by U.S. Patent Publication 2003/0053163 (hereafter referred to as Li et al.).

The Examiner has further rejected claims 1 and 39 under 35 USC §102(b), as being anticipated by PCT publication WO99/21302 (hereafter referred to as Askinger et al.)

For the reasons presented below, the Applicant respectfully traverses the above rejections and submits that claims 1-7 and 9-40 are now in allowable form.

Claim 1

The Examiner's attention is respectfully directed towards the below-emphasized limitations of amended claim 1:

In an optical network comprising a plurality of sites, a method of carrying out performance equalization of a plurality of channels, wherein each channel travels through the network from one of the sites, called an "add" site for that channel, to another one of the sites, called a "drop" site for that channel, comprising:

- a) **determining a wavelength-specific figure of merit for each channel-carrying-wavelength at each one of the plurality of sites;**
- b) **for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain threshold and the wavelength-specific figure of merit for each channel-containing wavelength at the respective site;**
- c) when at least one of the sites in the plurality of sites has not met the equalization condition:
 - i) determining a site-specific figure of merit for each site that is a drop site for at least one channel; and
 - ii) adjusting a transmit power of each channel in the plurality of channels as a function of the wavelength-specific figure of merit for the wavelength containing that channel at that channel's drop site and as a function of the site-specific figure of merit for that channel's drop site.

Firstly, with regard to Li et al., the Applicant respectfully submits that the Examiner's arguments are no longer applicable in view of the amendment to independent claim 1. It will be appreciated that neither the portion of Li et al. referred to by the Examiner in the Office Action, nor any other portion of Li et al., supports a contention that Li et al. discloses the limitations of claim 1, which include *inter alia*, "determining a wavelength-specific figure of merit for each channel-carrying-wavelength at each one of the plurality of sites" and "for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain threshold and the wavelength-specific figure of merit for each channel-containing wavelength at the respective site" [emphasis added].

Secondly, with regard to Askinger et al., the Applicant respectfully submits that Askinger et al. does not disclose the above-emphasized limitations of amended claim 1 either. Instead, Askinger et al. simply discloses determining at each individual node the number of channels entering that node and then on the basis of that number, controlling the amplifier at that node. Nowhere does Askinger et al. disclose "determining a wavelength-specific figure of merit for each channel-carrying-wavelength at each one of the plurality of sites", and "for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain threshold and the wavelength-specific figure of merit for each channel-containing wavelength at the respective site" [emphasis added].

Given that §2131 of the MPEP specifies that in order "to anticipate a claim, the reference must teach every element of the claim", the Applicant respectfully submits that neither Li et al. nor Askinger et al. is sufficient to support an anticipation rejection of amended claim 1.

Accordingly, independent claim 1, as amended, is believed to be in allowable form, and the Examiner is respectfully requested to withdraw his rejection of independent claim 1.

Claims 2-7 and 9-25

Claims 2-7 and 9-25 depend from independent claim 1, and as such incorporate by reference all the limitations contained therein, including the newly introduced limitations of “determining a wavelength-specific figure of merit for each channel-carrying-wavelength at each one of the plurality of sites” and “for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain threshold and the wavelength-specific figure of merit for each channel-containing wavelength at the respective site”.

Accordingly, for the same reasons as those presented above with respect to independent claim 1, the Examiner is respectfully requested to withdraw his rejection of dependent claims 2-7 and 9-25.

Claim 26

The Examiner’s attention is respectfully directed towards the below-emphasized limitations of amended claim 26:

A method of generating power adjustments used to control the transmit power of a plurality of channels, wherein each channel travels from a corresponding “add” site to a corresponding “drop” site in a WDM optical network comprising a plurality of sites, wherein each channel from among the set of channels either dropped at or travelling through a site occupies a distinct wavelength of light, the method comprising:

receiving a wavelength-specific figure of merit for each wavelength at each one of the plurality of sites;

determining a channel-specific figure of merit for each channel from the wavelength-specific figures of merit for those wavelength/site combinations corresponding to that channel;

for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain

threshold and the channel-specific figure of merit for each channel at the respective site;

when at least one of the sites in the plurality of sites has not met the equalization condition:

determining a site-specific figure of merit for each site that is a drop site for at least one channel from the wavelength-specific figures of merit associated with that channel's path; and

generating the power adjustment for each channel in the plurality of channels as a function of the channel-specific figure of merit for that channel at that channel's drop site and as a function of the site-specific figure of merit for that channel's drop site.

With regard to the Examiner's rejection of independent claim 26 in light of Li et al. the Applicant respectfully submits that the Examiner's arguments are no longer applicable in view of the amendments to independent claim 26. It will be appreciated that the neither the portion of Li et al. referred to by the Examiner in the Office Action, nor any other portion of Li et al. supports a contention that Li et al. discloses the limitations of claim 26, which include *inter alia*, "receiving a wavelength-specific figure of merit for each wavelength at each one of the plurality of sites", "determining a channel-specific figure of merit for each channel from the wavelength-specific figures of merit for those wavelength/site combinations corresponding to that channel" and "for each respective site in the plurality of sites, determining whether the respective site has met an equalization condition on a basis of a certain threshold and the channel-specific figure of merit for each channel at the respective site" [emphasis added].

In accordance with §2131 of the MPEP, the Applicant respectfully submits that the Examiner's reliance on Li et al. is not sufficient to support an anticipation rejection of amended claim 26.

Accordingly, amended claim 26 is believed to be in allowable form and the Examiner is respectfully requested to withdraw his rejection of independent claim 26.

Claims 27-35

Claims 27 through 35 depend from independent claim 26, and as such incorporate by reference all the limitations contained therein, including the newly introduced limitations that have been emphasized above.

Accordingly, for the same reasons as those presented above with respect to independent claim 26, the Examiner is respectfully requested to withdraw his rejection of dependent claims 27 through 35.

Claims 36-40

It will be seen that amended independent claims 36-40 comprise limitations similar to those of independent claim 26 and thus, for the same reasons as those set forth above with respect to claim 26, the Applicant respectfully submits that claims 36-40 are in allowable form. The Examiner is therefore respectfully requested to withdraw his rejection of independent claims 36-40.

i) REJECTIONS UNDER 35 USC §103

In the Office Action, the Examiner has rejected claim 8 under 35 USC §103(a) as being unpatentable in light of Li et al.

In response, the Examiner is respectfully referred to the Applicant's previous office action response dated June 14, 2004, in which the Applicant submitted that at the time the present invention was made, Li et al. was subject to an obligation of assignment to the same person. On these grounds, under 35 USC 103(c), and given that the present application was filed on or after November 29, 1999, the Examiner is respectfully requested to withdraw his rejection of claim 8.

CONCLUSION

In view of the above, it is respectfully submitted that claims 1-40 are now in condition for allowance. Reconsideration of the rejections and objections is requested. Allowance of claims 1-40 at an early date is solicited.

If the claims of the application are not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims or in making constructive suggestions so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,
SMART & BIGGAR



Sanro Zlobec
Reg. No. 52,535
Agent for the Applicant

Date: January 14, 2005
SMART & BIGGAR
1000 de la Gauchetière
Suite 3300
Montreal, Quebec H3B 4W5
Canada

Phone: (514) 954-1500
Fax: (514) 954-1396